

Early intervention programs using volunteers for child development and nutrition: a mixed methods systematic review protocol

Reviewers

Theodora Machaira^{1,2}

Liane Beretta Azevedo^{1,2}

Sharon Hamilton^{1,2}

Louisa Jane Ells^{1,2}

Raghu Lingam³

Janet Shucksmith^{1,2}

¹Health and Social Care Institute, Teesside University, United Kingdom

²Teesside Centre for Evidence-based Practice: an Affiliate Center of The Joanna Briggs Institute

³Institute of Health and Society, Newcastle University, United Kingdom

Corresponding Author:

Theodora Machaira

Email: t.machaira@tees.ac.uk

Review title

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Review question/objective

The overall aim of this mixed methods systematic review is to explore the effectiveness, and experience of early intervention programs which have used volunteers, peer supporters and community champions ~~that~~and aim to improve one or more of the following outcomes of children from conception to two years:

- 1. Cognitive development
- 2. Social and emotional development,
- 3. Speech and language
- 4. Nutrition.

The review will aim to answer the following research questions:

- 1. Are community based interventions using non-paid volunteers/peers effective in improving cognitive, social and emotional development, speech, language and nutrition?
- 2. What is the level of engagement (number of sessions attended, adherence) with such interventions in trial settings?
- 3. What are the experiences of families/caregivers of engaging in such interventions?

- 8
9 4. What are the reported changes in health and wellbeing of families/caregivers involved in these
10 interventions?

11 12 13 Background

14
15 Providing children with the best start in life has been a priority in many governments' agendas over the
16 past decade. Early intervention has been repeatedly recognized as the most appropriate way of
17 ensuring that every child has the best chance of achieving their full potential.^{1,2} There is growing
18 evidence to support the assertion that biological and psychosocial experiences in early life can affect
19 brain development and behavior³, suggesting that the most effective and cost-effective way to prevent
20 health inequalities is to intervene early before behavior and health patterns have been firmly
21 established.⁴ Therefore, interventions targeting early childhood may offer a unique opportunity to
22 improve long-term health and psycho-social outcomes.

23 Although early intervention is a priority worldwide, this review will focus on early intervention programs
24 that have been developed and tested in High Income Countries (based on their Human Development
25 Index) in order to identify evidence that could be replicated in a UK context.

26
27 Since 2010, UK government guidance has been calling for early intervention programs which target
28 children's development.⁵⁻⁷ Ensuring that children fulfill their developmental potential can improve school
29 attainment, build resilience and improve wellbeing. A number of elements have been identified as risk
30 factors regarding children's development. Poor communication skills, inadequate cognitive stimulation
31 and nutrient deficiencies resulting from poor nutrition have been found to be the main factors leading to
32 poor child development.⁸ For this reason, many early intervention programmes in the UK are now trying
33 to address those factors by intervening as early as possible.⁹

34
35 Some literature suggests that early interventions targeting child development can be effective.
36 Examples include early care and education (ECE) programmes in the U.S, such as Head Start, Early
37 Head Start, and the Chicago Child-Parent Centres.¹⁰ These programmes, which share common
38 aspects, aim to improve language development by providing services and educational resources to
39 parents and children. The services involved continuous intervention and assessment of child
40 development (physical, cognitive and emotional), family support and counseling.¹¹ Evaluation studies
41 of these programmes have demonstrated that children show significant improvements in language
42 development following their participation in the programmes.¹⁰ In addition, an early intervention program
43 in Canada had positive effects on language and development for children, as well as improvements in
44 parental wellbeing.¹¹ The program included center-based early learning (preschool and kindergarten
45 education), nutrition advice, and strengthening of parental psychosocial resources.

46
47 However, there is some debate around the longer-term effectiveness of early interventions. There is
48 promising evidence to support the longer-term effectiveness and cost effectiveness of early
49 interventions to prevent antisocial or delinquent behavior later in life.^{12,13} Nevertheless, with regards to
50 children's development, the long term effectiveness of early years interventions is still uncertain.^{14,15}

51
52 More recently, governments and local authorities have suggested that a community approach, mainly
53 through the use of volunteers, should be incorporated in early intervention programmes. By including

volunteer members of the community in such programmes, advocates have stated that this will improve relationships between early years services and the community, increase the levels of engagement with services, improve sustainability of universal services and allow for specialist staff to focus on families who need more targeted support.¹⁶ In fact, a study conducted in Nepal showed that volunteers were able to identify low birth weight of babies and provide advice and support to mothers in order to increase the baby's weight.¹⁷ Moreover, studies on the use of peer supporters as part of maternal and neonatal care in India and Kenya have shown that it improves both community and self-resilience.^{18,19} However, the principal measured outcomes of these studies involved infant mortality and disease control and therefore may not be applicable to child development interventions of the type to be studied here. In addition to the benefits for the community, the use of volunteers can also be a valuable experience for the volunteers themselves as it increases their employability and improves self-confidence.¹⁶

However, some have warned that the use of volunteers, despite the potential benefits, also comes with potential risks.²⁰ The increased numbers of unqualified/untrained individuals could mean that mistakes in terms of service provision and support can be made.²⁰

There is a gap in terms of the evidence of the effectiveness of a community based model applied in early intervention; particularly in early interventions targeting the outcomes of this review (cognitive, social and emotional development, speech and language and nutrition).²¹ In addition, the evidence base in terms of what works, for whom and when, is weak.¹ Although systematic reviews in child development outcomes have been conducted, to our knowledge systematic reviews on the effectiveness of volunteers, peer supporters and community champions in improving those, have not. Previous systematic reviews have focused on improving maternal outcomes, such as mental health²² whereas others have only included studies from the USA²³ or have focused on emotional and behavioral difficulties²⁴ rather than other aspects of development. In addition they have used a quantitative approach. The proposed mixed methods review, appraising both the quantitative and qualitative evidence base, will fill this research gap by specifically assessing the effect of volunteers, peer supporters and community champions on all domains of child development (cognitive, social and emotional, speech and language) and growth/nutrition. It is expected that much of the evidence base regarding the effectiveness of volunteers in improving child development outcomes will be in the gray literature (i.e. evaluation reports from within voluntary organizations) and therefore would not have been picked up in other systematic reviews. Lastly, an initial scope of the literature by searching MEDLINE, The Cochrane Database of Systematic Reviews (CDSR) and the JBIR Database of Systematic Reviews and Implementation Reports—found no mixed methods systematic reviews which have answered the research question of this review.

However, there is evidence from qualitative systematic reviews that mothers involved in early years interventions prefer support from peers rather than health professionals.^{25,26} In addition, quantitative systematic reviews have shown that lay health professionals (members of the community) can improve a number of health-related outcomes for both mothers and children, such as breastfeeding and immunization uptake.²⁷ Generally, most existing systematic reviews have focused on the use of volunteers and peer supporters in breastfeeding. However, there seems to be a lack of evidence on their effectiveness in improving child cognitive, social and emotional development and behavior outcomes. By synthesizing quantitative and qualitative evidence on the subject, questions around the feasibility, meaningfulness, appropriateness and effectiveness of utilizing volunteers in early

8
9 intervention programs targeting child development will be answered and gaps in the evidence base will
10 be identified.

11 The findings of this review will help to inform practice, make recommendations for future programs as
12 well as guiding further research.
13

14 **Keywords** 15 16

17 18 **Inclusion criteria** 19

20 **Types of participants** 21

22 The quantitative component of this review will consider studies that include community dwelling children
23 from conception to two years old. Studies which focus primarily on children who have been diagnosed
24 with a developmental condition as defined in the DSM-V or ICD-10 (e.g. intellectual disability, autism
25 spectrum disorder, Down syndrome, language and learning disorder, cerebral palsy, vision impairment,
26 hearing loss) will be excluded. However, we will include studies that have used a universal intervention
27 where children with developmental disorders have not been specifically targeted.

28 The qualitative component of this review will consider studies that include parents of children who are
29 two years old or younger. Studies which focus on parents of children with a developmental condition
30 will be excluded.

31 **Types of intervention(s)/phenomena of interest** 32

33 The quantitative component of the review will consider studies that independently or dependently
34 evaluate early interventions which have used volunteers, peer supporters and community champions
35 who are not part of the Health System and aim to improve cognitive, social and emotional development,
36 speech, language and nutrition in children 2 years old or younger. Studies that have evaluated
37 community based interventions will be included (for the purposes of this review 'community based
38 interventions' will be defined geographically, to include interventions that have been implemented
39 citywide or within community institutions such as neighborhoods, schools, churches, work sites,
40 voluntary agencies, or other organizations).

41 In addition, the focus of this review will be on early intervention programs that have been developed in
42 High Income Countries (based on the Human Development Index HDI). The HDI was chosen as an
43 indicator because it takes into account, not only the economic growth of a country but also life
44 expectancy, education and standard of living. It is therefore, a more inclusive indicator of the
45 development of a country.²⁸ The focus on High Income Countries was chosen in order to identify
46 effective early years interventions that could be replicated in a UK context and therefore inform policy
47 and practice in this country.

48 **Comparator** 49

50 The quantitative component of the review will consider studies that have compared the intervention
51 children who have not received intervention (usual care). Studies which compare two community based
52
53

8
9 early interventions will also be included.

10 11 **Types of outcomes**

12 This review will consider studies that include validated outcome measures that relate to changes in
13 cognitive, social and emotional development, speech, language and/or nutrition. Outcomes for
14 development will include assessments using a validated developmental screening tool (e.g. Ages and
15 Stages Questionnaires, Bayley Scales of Infant Development II, Social and Emotional
16 Assessment/Evaluation Measure). Outcomes for nutrition will include BMI scores and dietary intake.
17 Outcomes can be measured or self-reported. |

18 19 **Phenomena of Interest**

20 The qualitative component of this review will explore the experiences of parents/caregivers who have
21 participated in early ~~year~~-intervention programse.

22 23 **Context**

24 The qualitative component of this review will explore a specific community context including,
25 interventions delivered by non-paid volunteers, peer supports or community champions in a community
26 setting.

27 28 **Types of studies**

29 30 **Study designs**

31 The quantitative component of the review will consider both experimental and epidemiological study
32 designs including randomized controlled trials, non-randomized controlled trials, quasi-experimental,
33 before and after studies, prospective and retrospective cohort studies, case control studies and
34 analytical cross sectional studies.

35
36 The qualitative component of the review will consider studies that focus on qualitative data including,
37 but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and
38 feminist research.

39 40 **Search strategy**

41
42 The search strategy aims to find both published and unpublished studies. A three-step search strategy
43 will be utilized in this review. An initial limited search of MEDLINE (PubMed) and CINAHL will be
44 undertaken followed by analysis of the text words contained in the title and abstract, and of the index
45 terms used to describe article. The keywords that will be used are: new-born OR baby AND volunteers
46 AND communication OR language OR cognitive development OR social development OR emotional
47 development OR diet OR nutrition A second search using all identified keywords and index terms will
48 then be undertaken across all included databases (listed below separately for published and
49 unpublished literature). Thirdly, the reference list of all identified reports and articles will be searched
50 for additional studies. Only studies published in English will be considered in this review. Studies
51 published from 1980 onwards will be included. This is the start period when relevant studies (e.g. the
52
53

8 evaluations of the Family Nurse Partnership) started to be published and therefore was selected as the
9 range for this review.

10
11 Following the initial search, the following databases will be searched:

12 ASSIA

13 CINAHL

14 MEDLINE (PubMed)

15 Social Care Online

16 ScienceDirect

17 Cochrane Register of trials

18 Database of Abstracts of Reviews of Effectiveness (DARE)

19 Child Development & Adolescent Studies

20 PsycINFO

21 Scopus

22 Sage Journals Online

23 The search for grey literature will include (1):

24 Best Evidence Encyclopedia:

25 <http://www.bestevidence.org/>

26 Blueprints for Health Youth Development:

27 <http://www.blueprintsprograms.com>

28 Centre for Excellence and Outcomes (C4EO):

29 <http://www.c4eo.org.uk/themes/general/localpracticeexamples.aspx?themeid=10>

30 Collaborative for Academic, Social, and Emotional Learning (CASEL):

31 <http://casel.org/guide/>

32 Centre for Analysis of Youth Transitions (CAYT):

33 <http://www.ifs.org.uk/centres/caytRepository>

34 Child Trends LINKS (Lifecourse Interventions to Nurture Kids Successfully):

35 <http://www.childtrends.org/whatworks/>

36 Coalition for Evidence-Based Policy:

37 <http://evidencebasedprograms.org/wordpress/>

38 Databank of Effective Youth Interventions:

39 www.nji.nl/jeugdinterventies

40 Evidence Informed Policy in Education in Europe (EIPEE):

8 <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=23>

9
10 Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre):

11 <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=56>

12 EU-Compass for Action on Mental Health and Well-being:

13 http://ec.europa.eu/health/mental_health/eu_compass/index_en.htm

14 https://webgate.ec.europa.eu/sanco_mental_health/

15 European Alliance for Families:

16 http://europa.eu/epic/practices-that-work/index_en.htm

17 Investing in Children:

18 www.investinginchildren.eu

19 Joseph Rowntree Foundation

20 Netherlands Youth Institute:

21 <http://www.youthpolicy.nl/yp/Youth-Policy/Youth-Policy-subjects/Netherlands-Youth-Institute-Effective-youth-interventions>

22 National Registry of Evidence-based Programs and Practices (NREPP):

23 <http://www.nrepp.samhsa.gov/>

24 Promising Practices Network (PPN):

25 <http://www.promisingpractices.net/programs.asp>

26 Partnership for Results (PRF):

27 <http://www.partnershipforresults.org/programs.html>

28 What Works Clearing House (WWCH):

29 <http://ies.ed.gov/ncee/wwc/findwhatworks.aspx>

30 Search terms:

31 Search terms will include: new-born OR baby OR child OR infant OR toddler AND volunteers OR peer
32 supporters OR community champions AND communication OR language OR cognitive development
33 OR social development OR emotional development OR diet OR nutrition. Each electronic database will
34 be systematically searched using combinations of these search terms, tailored to the syntax and
35 functionality of each database.

36 37 38 39 40 41 42 43 44 45 46 **Assessment of methodological quality**

47 Quantitative papers selected for retrieval will be assessed by two independent reviewers for
48 methodological validity prior to inclusion in the review using standardized critical appraisal instruments
49 from the Joanna Briggs Institute Meta Analysis of Statistics Assessment and Review Instrument (JBI-
50 MASTARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through
51 discussion, or with a third reviewer.

8
9 Qualitative papers selected for retrieval will be assessed by two independent reviewers for
10 methodological validity prior to inclusion in the review using standardized critical appraisal instruments
11 from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix
12 I). Any disagreements that arise between the reviewers will be resolved through discussion, or with a
13 third reviewer.

14 15 **Data collection**

16
17 Quantitative data will be extracted from papers included in the review using the standardized data
18 extraction tool from JBI-MASARI (Appendix II). The data extracted will include specific details about
19 the interventions, populations, study methods and outcomes of significance to the review question and
20 specific objectives.

21
22 Qualitative data will be extracted from papers included in the review using the standardized data
23 extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the
24 interventions, populations, study methods and outcomes of significance to the review question and
25 specific objectives.

26 27 **Data synthesis**

28
29 Evidence from RCT data will, where possible be pooled in statistical meta-analysis using JBI-MASARI.
30 All results will be subject to double data entry. Effect sizes expressed as odds ratio (for categorical data)
31 and weighted mean differences (for continuous data) and their 95% confidence intervals will be
32 calculated for analysis. Heterogeneity will be assessed statistically using the standard Chi-square.
33 Where statistical pooling is not possible the findings will be presented in narrative form including tables
34 and figures to aid in data presentation where appropriate.

35
36 Qualitative research findings will, where possible be pooled using JBI-QARI. This will involve the
37 aggregation or synthesis of findings to generate a set of statements that represent that aggregation,
38 through assembling the findings rated according to their quality, and categorizing these findings on the
39 basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to
40 produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-
41 based practice. Where textual pooling is not possible the findings will be presented in narrative form.

42
43 The findings of each single-method synthesis included in this review will be aggregated using the JBI-
44 MMARI. This will involve the configuration of the findings to generate a set of statements that represent
45 that aggregation through coding any quantitative to attribute a thematic description to all quantitative
46 data. The resulting themes will be assembled from quantitative and qualitative syntheses; and
47 configured to produce a set of synthesized findings in the form of a theoretical framework, set of
48 recommendations or conclusions.

49 50 **Conflicts of interest**

51
52 None.
53

8
9 **Acknowledgements**

10 This review will be undertaken as part of a PhD degree.
11

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8 **Appendix I: Appraisal instruments**
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MAStARI Appraisal instrument

JBIR Critical Appraisal Checklist for Randomised Control / Pseudo-randomised Trial

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Was the assignment to treatment groups truly random?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were participants blinded to treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was allocation to treatment groups concealed from the allocator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were those assessing outcomes blind to the treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the control and treatment groups comparable at entry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were groups treated identically other than for the named interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in the same way for all groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

JBIR Critical Appraisal Checklist for Descriptive / Case Series

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Was study based on a random or pseudo-random sample?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the criteria for inclusion in the sample clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were confounding factors identified and strategies to deal with them stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were outcomes assessed using objective criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If comparisons are being made, was there sufficient descriptions of the groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up carried out over a sufficient time period?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBIC Critical Appraisal Checklist for Comparable Cohort/ Case Control

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is sample representative of patients in the population as a whole?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are the patients at a similar point in the course of their condition/illness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has bias been minimised in relation to selection of cases and of controls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are confounding factors identified and strategies to deal with them stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are outcomes assessed using objective criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up carried out over a sufficient time period?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

QARI Appraisal instrument

**JBIR QARI Critical Appraisal Checklist for Interpretive
& Critical Research**

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: ☐ Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

8 **Appendix II: Data extraction instruments**
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MAStARI data extraction instrument

**JBIR Data Extraction Form for
Experimental / Observational Studies**

Reviewer Date

Author Year

Journal Record Number

Study Method

RCT ☐ Quasi-RCT ☐ Longitudinal ☐

Retrospective ☐ Observational ☐ Other ☐

Participants

Setting

Population

Sample size

Group A Group B

Interventions

Intervention A

Intervention B

Authors Conclusions:

.....
.....

Reviewers Conclusions:

.....
.....

Study results

Dichotomous data

Outcome	Intervention () number / total number	Intervention () number / total number

Continuous data

Outcome	Intervention () number / total number	Intervention () number / total number

8 **QARI data extraction instrument**
9

10
11 **JBI QARI Data Extraction Form for Interpretive
12 & Critical Research**
13

14 Reviewer Date

15 Author Year

16 Journal Record Number

17
18
19 **Study Description**

20 Methodology

21
22 Method

23
24 Phenomena of interest

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26 Setting

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28 Geographical

29
30 Cultural

31
32 Participants

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34 Data analysis

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36 Authors Conclusions

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38 Comments

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40 Complete

41 Yes ☐

42 No ☐

[illegible]

Extraction of findings complete

Yes ☐

No ☐

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